



Canolfan
Milfeddygaeth Cymru

Wales Veterinary
Science Centre

Issue:35 (Dec 2021)

NEWSLETTER

CYLCHLYTHYR



NADOLIG LLAWEN A BLWYDDYN NEWYDD DDA

to all our colleagues, customers, and supporters

HAPPY CHRISTMAS AND A HAPPY NEW YEAR

Blackleg was the cause of death of a 7-month-old calf, one of two to die quickly. The heifer submitted

Figure 1 Typical Blackleg lesion in the left triceps



for examination was found flat out in a field and was brought into a shed but died the next day after being helped to sit up. Typical lesions were seen in forelimb and hindlimb muscles (figure 1). A gram-spores resembling

Clostridium chauvoei which was confirmed by fluorescent antibody testing (FAT). Vaccination is an inexpensive means of avoiding this costly disease, but this should be given before the time of risk – before animals go out to grass.

Johne's disease was confirmed in a yearling ewe where poor condition appeared to be affecting 3% of the flock. The affected ewes were from different groups and various ages, some were homebred and others purchased. The submitted yearling had marked bottle jaw and was emaciated. No fat was present in the body and the mesenteric lymph nodes were prominent. Three sections of small intestine were sent for histological investigation. Special stains confirmed the presence of acid-fast bacilli within granulomatous lesions in the ileal mucosa confirming paratuberculosis.

Affected stock should be segregated and culled as soon as is possible and their progeny should not be retained for breeding.

Salmonella typhimurium was cultured from one ewe submitted where 20 had died over a two-

week period. A few lambs had been seen with diarrhoea and there had been a sick calf the week before the submission. At necropsy the ewe had a peritonitis, there was an abomasitis and ileitis and the GIT contained red/brown liquid. Fibrinopurulent material were also found in the thorax and pericardium. There was a lymphadenopathy, and the kidneys were pulpy with red areas on the surface.

Salmonella typhimurium is zoonotic and presents higher risks to humans than other serotypes.

Parasitic gastroenteritis was diagnosed in two calves submitted from a spring calving dairy herd where 15 were in poor condition from a group of 120. The calves were both emaciated and dehydrated. The abomasal mucosa was thickened and dark pink with raised white circular areas (Fig 2).

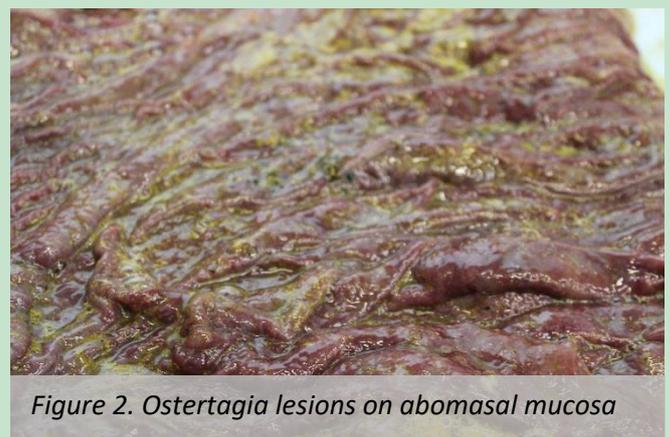


Figure 2. *Ostertagia* lesions on abomasal mucosa

Worm egg counts on the two calves had trichostrongyle-type egg counts of 10,150 and 12,550 epg respectively. Samples from these calves and other animals on the farm were sent to APHA Carmarthen to investigate possible anthelmintic resistance. Detailed advice and information is available from COWS www.cattleparasites.org.uk.

Lungworm (*Dictyocaulus viviparus*) was diagnosed on two occasions in October. In the first outbreak infection was confirmed in recently housed 5-month-old calves. Four calves had died and another five were coughing. There were copious lung worm and white frothy mucus in the larynx, trachea and bronchi of a calf submitted for post mortem examination (Fig 3).

In the second outbreak a single heifer had died after acute-onset respiratory disease and another four were affected from a group of 60 purchased store cattle. Live lungworm were found in the pharynx and there were copious lungworm in the bronchial tree. There was extensive interlobular and subpleural emphysema.

Figure 3. Copious lungworm in the lung airways



Bovine lungworm is usually a problem in younger cattle in their first grazing season because they have not had previous exposure from which to develop immunity. Cases in adults are less common but do occur when immunity has not been established. Both heavy stocking densities and wet mild summers increase the risk of pastures being contaminated with large numbers of infective larvae. Care should be taken with treating others on the same at-risk pasture as rapid death of lungworm can lead to anaphylaxis and death from secondary pneumonia. Prevention including vaccination should be considered in future years.

“COWS” have produced a fantastic lungworm control [factsheet](#) which is available on their website.

Salt poisoning was the cause of death of 12 piglets in a herd of 500 weaned pigs. The owner later confirmed that the piglets went for a short period of time without fresh water, deaths ceased when water was provided. Clinical signs seen included

diarrhoea, rectal prolapse, head pressing, lateral recumbency and paddling. All the piglets died within four hours. Gross PME found large areas of purple discolouration over the skin, there were ecchymoses in the lung parenchyma and straw-coloured fluid in the pericardial sac. There was haemorrhage around the spinal cord at the atlanto-occipital joint and subdural haemorrhage around the brainstem. The diagnosis was confirmed by histology of the brain.

Osteogenesis imperfecta was diagnosed by histology of one pedigree stabiliser calf that was aborted at term. The calf had abnormal limbs, and multiple fractures (Fig 4). This is a genetic defect of collagen synthesis which results in increased bone fragility and other connective tissue defects. The mutation is within the COL1A1 gene. The condition is autosomal dominant, and

Figure 4. Abnormal limb conformation in an OI calf



the affected calves are non-viable. The sire was the same as previously reported OI affected calves in APHA. [Disease surveillance in England and Wales, July 2021 - 2021 - Veterinary Record - Wiley Online Library](#)

WVSC VIOs: Beverley Hopkins & Jon. King
Roger Daniel, Kate Hovers and Ian Davies

Wales Veterinary
Science Centre
Y Buarth, Aberystwyth,
Ceredigion, SY23 1ND

01970 612374

enquiries@wvsc.wales

<http://www.wvsc.wales>



walesvetscience



@WVSCAber

Please check the eligibility for **free carcass collection** via this website:

<http://apha.defra.gov.uk/postcode/pme.asp>

The suitability of submissions for a postmortem exam. must always be discussed with the WVSC duty vet.